

Conversation Contents

Geochemistry

suter.glenn@epamail.epa.gov

From: suter.glenn@epamail.epa.gov
Sent: Fri Jan 06 2012 10:28:48 GMT-0700 (MST)
To: rseal@usgs.gov
Subject: Geochemistry

Bob, since Kate canceled the call, I wanted to contact you about leachate.
What do we use to estimate the composition of tailings and waste rock leachate?
Can we use the humidity cell leachates?
If so, do we use the means or extremes?

suter.glenn@epamail.epa.gov

From: suter.glenn@epamail.epa.gov
Sent: Sat Jan 07 2012 11:40:56 GMT-0700 (MST)
To: rseal@usgs.gov
Subject: Re: Geochemistry

Bob, sorry you missed me.
Do you have one of the copies of the PLP data dump?
They have a chapter on geochemistry (Ch 11) that I can email if you do not have it.

Also, the ICF folks want to get together with you, Phil and me.
Are you available early this coming week? (Jan 9 - 11)?

Concerning your comments below.

(b) (5)

Also, PLP will provide data that are not in the reports, but it is still in the form of pdf tables.
They will not provide data files.

Concerning the data available for BLM, (b) (5)

There is plenty of ambient water chemistry in the PLP reports.

-----Robert R Seal <u><rseal@usgs.gov> wrote: -----

To: Glenn Suter/CI/USEPA/US@EPA
From: Robert R Seal <u><rseal@usgs.gov>
Date: 01/06/2012 02:29PM
Subject: Re: Geochemistry

Glenn,

The humidity cell results represent the best picture of tailings and waste-rock leachate. At least for the tailings, they are best considered a "worst case" scenario because water and/or oxidation of sulfide minerals at shallow levels of the piles will significantly limit oxidation at depth. In other words, the "reactive" portion of the tailings piles will likely only be the upper meter or so. For example, at the Elizabeth Mine Superfund site in Vermont, where I have worked extensively with Region 1, the oxidized profile extends between 0.3 to 2 m down into the pile, where the thickest part is roughly 30 m deep. The pile has been in place for over 50 years.

(b) (5)

(b) (5)

[Redacted]

(b) (5)

[Redacted]

[Redacted]

Bob
++++++
Robert R (Bob) Seal, II
US Geological Survey
954 National Center
12201 Sunrise Valley Drive
Reston, VA 20192
703.648.6290 office
703.648.6383 fax
[<u>rseal@usgs.gov](mailto:rseal@usgs.gov)

From: Glenn Suter [<u>suter.glenn@epamail.epa.gov](mailto:suter.glenn@epamail.epa.gov)>
To: [<u>rseal@usgs.gov](mailto:rseal@usgs.gov)>
Date: 01/06/2012 12:28 PM
Subject: Geochemistry

Bob, since Kate canceled the call, I wanted to contact you about leachate.
What do we use to estimate the composition of tailings and waste rock leachate?
Can we use the humidity cell leachates?
If so, do we use the means or extremes?